



**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

05-1144

**HARRAH'S ENTERTAINMENT, INC., and
HARRAH'S OPERATING COMPANY, INC.,**

Plaintiffs-Appellants,

v.

**STATION CASINOS, INC., BOULDER STATION, INC.,
PALACE STATION HOTEL & CASINO, INC.,
SANTA FE STATION, INC.,
SUNSET STATION, INC.,
TEXAS STATION, LLC, and
GREEN VALLEY RANCH GAMING, LLC,**

Defendants-Appellees.

**Appeal from the United States District Court
for the District of Nevada
in case no. 01-CV-0825, Judge David A. Ezra.**

REPLY BRIEF OF PLAINTIFFS-APPELLANTS

Norman H. Beamer
Mark D. Rowland
ROPES & GRAY LLP
525 University Avenue
Palo Alto, California 94301
Tel.: 650.617.4000
Fax: 650.617.4090

June 14, 2005

TABLE OF CONTENTS

| | Page |
|---|------|
| I. INTRODUCTION | 1 |
| II. THE DISTRICT COURT'S JUDGMENT OF INVALIDITY BASED ON INDEFINITENESS SHOULD BE REVERSED | 3 |
| A. The Term "Theoretical Win Profile" Would Have Been Readily Understood By Those Skilled In The Art..... | 4 |
| 1. The Specifications Support Defining "Theoretical Win Profile" As Requiring Data From Multiple Properties..... | 5 |
| 2. "Theoretical Win Profile" Is Not Read In Isolation – A Specific Definition Is Not Necessary..... | 8 |
| B. Expert Testimony Confirms That "Theoretical Win Profile" Would Have Been Understood By One Skilled In The Art..... | 9 |
| 1. Station's Experts Understood That Theoretical Win Profile Was A Profile Of Theoretical Win With A Multi-Property Aspect..... | 9 |
| 2. Calculating "Theoretical Win" Was Known | 10 |
| 3. Harrah's Experts' Request To See The Underlying Math Has No Bearing On The Analysis | 11 |
| C. The Prosecution History May Properly Be Used To "Clarify Claim Meaning And Hence Provide Definiteness" | 12 |
| D. Station's Additional Arguments Are Not Sound | 13 |
| 1. Station's Brief Presents A Chimera Of Legal Doctrines Unrelated To Indefiniteness | 13 |
| a. The New Matter Doctrine Is Inapposite | 13 |
| b. Whether A District Court Can Correct PTO Error Is Irrelevant..... | 14 |
| 2. The Patent Examiner Was Not Confused Regarding The Invention | 15 |
| 3. Describing "Theoretical Win Profile" As "Functional" Is A Red Herring | 16 |

| | | |
|------|---|----|
| 4. | “Theoretical Win Profile” Does Not Require A Mathematical Definition | 17 |
| III. | JUDGMENT OF INVALIDITY BASED ON LACK OF WRITTEN DESCRIPTION SHOULD BE REVERSED | 19 |
| A. | Written Description and Definiteness Are Different Inquiries | 19 |
| B. | Record Evidence Establishes That The Specifications Would Be Understood To Describe The Inventions As Claimed | 20 |
| 1. | There Is No Inadequacy As A Matter Of Law | 22 |
| 2. | The Specifications Describe The Multi-Property Aspect Of The Claimed Inventions | 24 |
| 3. | The Specifications Need Not Give A Formula | 25 |
| C. | Theoretical Win Profile Is Not A “Purely Functional Limitation” | 26 |
| 1. | Cases Cited By Station Do Not Support The District Court’s Judgment. | 26 |
| 2. | The Specifications Describe A Structure- Function Relationship | 27 |
| D. | There Is A Genuine Dispute Over The Disclosure Of The Specifications | 28 |
| IV. | THE PATENTS IN SUIT DO NOT VIOLATE THE BEST MODE REQUIREMENT | 29 |
| V. | CONCLUSION | 33 |

TABLE OF AUTHORITIES

CASES

| | |
|---|--------------|
| <i>All Dental Prodx, LLC v. Advantage Dental Prods., Inc.</i> , 309 F.3d 774 (Fed. Cir. 2002) | 9, 13 |
| <i>Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.</i> , 725 F.2d 1350 (Fed. Cir. 1984) | 16 |
| <i>Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.</i> , 359 F.3d 1367 (Fed. Cir. 2004) | 5, 8, 23 |
| <i>Bayer AG v. Schein Pharms., Inc.</i> , 301 F.3d 1306 (Fed. Cir. 2002) | 31 |
| <i>In re Beach</i> , 152 F.2d 981 (C.C.P.A. 1946) | 16 |
| <i>Chemcast Corp. v. Arco Indus.</i> , 913 F.2d 923 (Fed. Cir. 1990) | 33 |
| <i>Enzo Biochem, Inc. v. Gen-Probe, Inc.</i> , 323 F.3d 956 (Fed. Cir. 2002) | 26 |
| <i>Glaxo Wellcome, Inc. v. Impax Labs., Inc.</i> , 356 F.3d 1348 (Fed. Cir. 2004) | 13 |
| <i>Group One, Ltd. v. Hallmark Cards, Inc.</i> , No. 04-1296, 2005 WL 1138998 (Fed. Cir. May 16, 2005) | 14 |
| <i>Howmedica Osteonics Corp. v. Tranquil Prospects, Ltd.</i> , 401 F.3d 1367 (Fed. Cir. 2005) | 5, 6, 13, 18 |
| <i>Lockwood v. Am. Airlines, Inc.</i> , 107 F.3d 1565 (Fed. Cir. 1997) | 25 |
| <i>Moba, B.V. v. Diamond Automation, Inc.</i> , 325 F.3d 1306 (Fed. Cir. 2003) | 23 |
| <i>New Railhead Mfg., L.L.C. v. Vermeer Mfg. Co.</i> , 298 F.3d 1290 (Fed. Cir. 2002) | 24 |

| | |
|--|------------|
| <i>SmithKline Beecham Corp. v. Apotex Corp.</i> , 403 F.3d 1331 (Fed. Cir. 2005) | 11, 18 |
| <i>Teleflex, Inc. v. Ficosa N. Am. Corp.</i> , 299 F.3d 1313 (Fed. Cir. 2002) | 30, 31, 32 |
| <i>Transco Prods. Inc. v. Performance Contracting, Inc.</i> , 38 F.3d 551 (Fed. Cir. 1994) | 30, 31 |
| <i>Union Oil Co. of Cal. v. Atlantic Richfield Co.</i> , 208 F.3d 989 (Fed. Cir. 2000) | 23 |
| <i>Union Pac. Res. Co. v. Chesapeake Energy Corp.</i> , 236 F.3d 684 (Fed. Cir. 2001), cited by Station | 18 |
| <i>Univ. of Rochester v. G.D. Searle & Co.</i> , 358 F.3d 916 (Fed. Cir. 2004) | 24, 29 |
| <i>Vas-Cath Inc. v. Mahurkar</i> , 935 F.2d 1555 (Fed. Cir. 1991) | 19, 20 |
| <i>Western Elec. Co., Inc. v. Piezo Tech., Inc.</i> , 860 F.2d 428 (Fed. Cir. 1988) | 16 |

STATUTES

| | |
|-----------------------|-----------|
| 35 U.S.C. § 112 | 4, 20, 30 |
|-----------------------|-----------|

TABLE OF ABBREVIATIONS

| Abbreviation | Explanation |
|-----------------------|---|
| The '647 patent | U.S. Patent No. 5,761,647 (JAX77-105) |
| The '362 patent | U.S. Patent No. 6,183,362 (JAX106-132) |
| The '013 patent | U.S. Patent No. 6,003,013 (JAX133-168) |
| The Patents in Suit | The '647, '362 and '013 Patents |
| The Claims at Issue | All claims of the '647 and '362 Patents, and all claims of the '013 patent except claims 1, 2, 21, 22, 31, 39-42, 46, 48 and 49 — <i>i.e.</i> , all claims that include the phrase, “theoretical win profile” |
| Harrah's | Plaintiffs/Appellants |
| Station | Defendants/Appellees |
| Order | June 3, 2004 Amended Order Granting Defendant's Motion For Partial Summary Judgment Of Invalidity Under 35 U.S.C. § 112. 321 F. Supp. 2d 1173 (D. Nev. 2004) (JAX27-52). |
| '121 Patent Col:L1-L2 | Col refers to the column number of the '121 Patent, L1-L2 refers to the cited lines |
| HB | Harrah's Opening Brief |
| SB | Station's Brief |

Emphasized Text: unless otherwise noted, all emphasis in quoted text has been added.

I. INTRODUCTION

In this Reply, Harrah's confirms that the jurisprudence of this Court compels reversal of the District Court's judgment of invalidity. Station effectively abandons the District Court's rationale and substitutes essentially different grounds on which Station argues for affirmance. Station's arguments, old and new, are insufficient to support affirmance. Nothing in Station's brief detracts from Harrah's basic points on appeal:

1. The District Court erred in granting summary judgment of invalidity based on indefiniteness because

(a) "theoretical win" is a well-understood term, "profile" is an ordinary word with accepted dictionary definitions, and putting the terms together creates a phrase that has a readily-construed meaning informed by the meaning of its terms, the usage of the phrase and its component terms in the specification, the definition in the prosecution history, and the contextual language of the claims;

(b) the breadth of the definition adopted by the District Court during claim construction, admitted by Station to be clear from the intrinsic record, and the alleged functional nature of the claim limitations, do not *ipso facto* render the claims indefinite;

(c) the claims recite theoretical win profile by what it is and the computer structures and computer-implemented acts by which it is generated, limiting the scope of the claims in a definite way, and there is no proper legal basis for requiring the claims to be further limited to a specific formula, algorithm or type of averaging;

(d) prior art and proposed future customer tracking programs can readily be examined to determine whether they meet the requirements of the claim, including whether they generate a theoretical win profile as a function of estimated winnings from customer activity at a plurality of casino properties over a time period; and

(e) Harrah's has consistently held to the claim construction adopted by the District Court, and has not attempted to substitute new definitions limiting a theoretical win profile to a "single value" or a "large number of data points."

2. The District Court erred in granting summary judgment of invalidity based on inadequate written description because

(a) the District Court conflated written description and indefiniteness, and did not make the proper factual inquiry;

(b) record evidence supports a finding that persons skilled in the art would have understood from the original disclosure that theoretical win profile was described as now claimed; and

(c) there is no requirement as a matter of law that the original specification limit the means by which a claimed invention is implemented, or otherwise teach the claimed invention in a particular way (*e.g.*, by providing a formula, algorithm, table or value).

In addition, the District Court's judgment of invalidity cannot be sustained on the alternate ground that the best mode requirement was violated. There are genuine issues of material fact as to whether the inventors had a best mode at the time of filing and, if so, what it was. Also, the District Court erred in its finding on summary judgment that the specification inadequately disclosed the alleged best mode, because record evidence supports a finding that persons skilled in the art would have understood that the specification describes generating a theoretical win profile by averaging theoretical win data across multiple properties.

II. THE DISTRICT COURT'S JUDGMENT OF INVALIDITY BASED ON INDEFINITENESS SHOULD BE REVERSED

The District Court's ruling on summary judgment that the term "theoretical win profile" is indefinite should be reversed. The term

“theoretical win profile” would have been readily understood by those skilled in the art at the time of filing when read in the context of the claims and the specification. This is confirmed by both Station’s and Harrah’s experts, *infra*, p. 9. The prosecution history, which is properly used to clarify claim meaning and provide definiteness, further confirms that “theoretical win profile” includes data from multiple properties, *infra*, pp. 12-13.

A finding of invalidity under 35 U.S.C. § 112, paragraph 2, is a matter of law, and so the District Court’s judgment is reviewed without deference. Station’s brief, which adds nothing to the flawed District Court opinion, misapplies law using unrelated legal doctrines to provide meritless alternative arguments not considered by the District Court.

A. The Term “Theoretical Win Profile” Would Have Been Readily Understood By Those Skilled In The Art

As explained in Harrah’s opening brief, the term “theoretical win profile” means “a summary or analysis of estimates of a casino’s winnings from a customer’s betting activity over a period of time . . . [which] is generated based on estimates of casino winnings from the customer across the affiliated casino properties.” HB18. The District Court erred in holding the claims indefinite because, as the specification, the

prosecution history and the testimony of the experts make clear, the term “theoretical win profile” would have been understood by those skilled in the art. Because the District Court rendered its decision on summary judgment, the underlying facts (which Station incorrectly asserts are “undisputed”) must be construed in the light most favorable to Harrah’s, and all inferences drawn in Harrah’s favor.

**1. The Specifications Support Defining
“Theoretical Win Profile” As Requiring Data
From Multiple Properties**

Claims are understood in the context of the specification as a whole. *Howmedica Osteonics Corp. v. Tranquil Prospects, Ltd.*, 401 F.3d 1367, 1371 (Fed. Cir. 2005). Claim limitations, in turn, are also understood within both the context of the claim and the context of the specification. It is not necessary that a particular claim term be explicitly defined in order to meet the definiteness requirement. *See, e.g., Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004) (“The failure to define the term is, of course, not fatal, for if the meaning of the term is fairly inferable from the patent, an express definition is not necessary . . .”). This Court made this proposition abundantly clear in *Howmedica*. 401 F.3d at 1371-73. In the court below, the parties had argued whether the “transverse sectional dimensions” of the claimed prosthesis should be

measured in one dimension as a cross section or in two dimensions as an area. The District Court found the claims indefinite because the specification did not define which dimensions should be used to measure the transverse sectional dimensions. This Court reversed, holding that the meaning of that term was made clear by the specification as a whole. *Id.* at 1373. This Court explained that the “overriding purpose of the invention” as described in the specification was a prosthesis that fit snugly inside the medullary canal, and a one-dimensional measurement of “transverse sectional dimensions” would not provide “the snug fit that is the centerpiece of this invention.” *Id.* at 1372.

Here, the ‘647 and ‘362 patent specifications describe an invention in the art of casino management, the central feature of which is a multiple-property aspect. The title of both patents is “*National Customer Recognition System and Method*,” and the first sentence of the abstract explains that the invention is directed to “[a] system and method for implementing a customer tracking and recognition program that encompasses customers’ gaming and non-gaming activity alike *at a plurality of affiliated casino properties*.” JAX77; JAX106. The specifications further explain that “[t]he present invention allows customer data to be accumulated

across all casino properties and made available at any casino property."

JAX92, 2:20-22.

Moreover, specifically in the context of describing "theoretical win profile," the specification states:

System 100 helps eliminate some of the vagaries introduced by the discretionary nature of comping by providing the same customer data to employees at all casino properties visited by a customer. This ensures that comping decisions will at least be based on consistent estimates of the customer's average theoretical win profile. Regular customers at one casino property of the company who visit a new casino property of the company are more likely to be "comped" at a level consistent with their play at their regular casino property. The national character of the present tracking system also means that the average daily wager figure will include a larger number of data points, since *the customer's gaming activities at all casino properties are included.*"

JAX98, 13:7-21.

The specification goes on to describe management systems and database structures which centralize customer information, for example, in a "central patron database (CPDB) that is coupled to each casino." JAX77; JAX106. The specification also describes an embodiment in which the database is distributed among computers at the various casino properties. JAX98, 14:22-65. Despite the absence of an explicit definition for "theoretical win profile" in the specification, the Patents in Suit clearly explain that the invention is directed to a system which includes data from

multiple casino properties. As in *Howmedica*, this central feature of the two patents properly gives context to the phrase “theoretical win profile.”

Station’s reliance on the ‘013 specification is misplaced. The ‘013 patent, which is a continuation in part of the ‘647, contains additional disclosure, including novel physical instrumentalities for differentiating customers based on their “worth” – the expected revenue they will provide the casino. In contrast to the ‘647 and ‘362 patents, the ‘013 is titled “Customer Worth Differentiation By Selective Activation of Physical Instrumentalities Within the Casino.” JAX133. The abstract of this patent explains that “[c]ustomer status may be based on accumulated points *or* the theoretical win profile.” JAX133. The description in the ‘013 patent of theoretical win profile for both single properties and multiple properties is thus irrelevant, because the physical instrumentalities of this patent were an alternative basis for novelty that did not require cross-property theoretical win profile. JAX958. The fact that the specification is broader than what is actually claimed does not make the claims indefinite.

2. “Theoretical Win Profile” Is Not Read In Isolation – A Specific Definition Is Not Necessary

The law does not require that a term be explicitly defined in the specification in order to comply with the definiteness requirement. *Bancorp*,

359 F.3d at 1372; *All Dental Prodx, LLC v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 778-79 (Fed. Cir. 2002). In fact, it is not required that the term even be *included* in the original disclosure of the patent. *All Dental*, 309 F.3d at 777.

B. Expert Testimony Confirms That “Theoretical Win Profile” Would Have Been Understood By One Skilled In The Art

1. Station’s Experts Understood That Theoretical Win Profile Was A Profile Of Theoretical Win With A Multi-Property Aspect

As outlined in Harrah’s opening brief (HB31), the testimony of the experts on both sides of this case indicated that they readily understood that the term “theoretical win profile” included a multi-property aspect to the invention. For example, Station’s expert, Mr. Lewin, stated in his expert report that he understood theoretical win profile to mean “theoretical win,” a term that was “commonly known at the time . . . [but] based on data from monitored betting activity at multi-properties.” JAX8191. He reiterated this point, stating “in my opinion, theoretical win profile is no different than traditional theoretical win as of May 24, 1996 (the filing date of the ‘647 patent), other than the multi-property aspect.” JAX8192. Similarly, Station’s expert, Mr. Kilby, stated that “‘theoretical win profile’ is just a

summary or calculation of two or more theoretical win values obtained from different casinos.” JAX3841.

2. Calculating “Theoretical Win” Was Known

Station’s experts understood how to calculate “theoretical win” at the time of the invention. They admitted that they understood the meaning of theoretical win, as well as ways in which theoretical win data could be combined. Station’s expert, Mr. Kilby, explained how to calculate a theoretical win value, and stated that the term has “been used by casinos for decades.” JAX3840. Station’s expert, Mr. Lewin, described theoretical win as a concept already in the prior art and described it as “typically based on a player’s play time, the player’s average bet, the house hold for a particular game and number of bets placed.” JAX8196. He also cited to prior art references explaining how to calculate the value of theoretical win from a precise formula. JAX7804. Both experts understood that a “theoretical win profile” was simply a “summary or analysis” (*i.e.*, a “profile”) of theoretical win data, but (in light of the disclosed invention) including data for multiple properties. There is no dispute that different methods were known to calculate theoretical win for a single property, including the combination of data from multiple gaming sessions or multiple

trips. There was no difference in kind for the types of calculations required to combine the data from multiple properties. JAX3140.

Station repeatedly cites Mr. Lewin's declaration for the proposition that very different results are obtained depending on how even the most basic form of averaging is applied. SB19; SB38; SB39. This argument formed no part of the District Court's opinion. It is wrong in any event because the fact that the claims cover more than one way of calculating a theoretical win profile does not render them indefinite.

SmithKline Beecham Corp. v. Apotex Corp., 403 F.3d 1331, 1341 (Fed. Cir. 2005) (“[b]readth is not indefiniteness.”).

3. Harrah's Experts' Request To See The Underlying Math Has No Bearing On The Analysis

The District Court correctly rejected Station's argument that the testimony of Harrah's experts is contradictory. JAX43-44. Station fails to cite the context of the statements which makes plain that there is no contradiction. In the case of Mr. Spencer, for example, his entire “admission” that he needed underlying math to determine whether the prior art might disclose a theoretical win profile consists of one question regarding theoretical win, *not* theoretical win *profile*:

Q: Would you need to see an algorithm of how theoretical earning potential was calculated in order to understand

that theoretical earning potential was a type of *theoretical win* within the meaning of the patent-in-suit?

A: That would certainly be of assistance, yes.

JAX1147. In addition, Mr. Spencer testified that the alleged prior art system in question was not used with separate properties. JAX1146-47.

In the case of Mr. Rowe, he was shown one page displaying a “player rating screen,” and was asked whether that display provided a theoretical win profile. He responded “I can’t answer that with the information that’s on this screen” and added that he would “need the underlying math that generated that number to understand how it was derived.” JAX 1130-31. The page at issue did not indicate the source of the data. One of ordinary skill in the art would need to know whether the purported theoretical win profile value was based upon estimated winnings from betting activity, and whether it included data from more than one property.

C. The Prosecution History May Properly Be Used To “Clarify Claim Meaning And Hence Provide Definiteness”

Although the specification alone supports the definiteness of “theoretical win profile,” the definition of the term in the prosecution history is also consistent with the meaning as defined in the Markman hearing. As explained in Harrah’s opening brief (HB28-30), it is well established that the

prosecution history may properly be used to support the definiteness of the claims. This Court recently explained that the prosecution history is “relevant to the meaning of [the term at issue] to one of skill in the art at the earlier time of filing.” *Howmedica*, 401 F.3d at 1372. *Accord All Dental*, 309 F.3d at 779 (holding that the prosecution history can “clarify the claim meaning and hence provide definiteness”).

D. Station’s Additional Arguments Are Not Sound

1. Station’s Brief Presents A Chimera Of Legal Doctrines Unrelated To Indefiniteness

Station’s argument that the prosecution history may not be used in an indefiniteness analysis is so tenuous that Station must make a legal chimera of the law on “new matter” and the law on the District Court’s authority to correct a Patent Office error (SB30-32), neither of which has any bearing on the law of indefiniteness.

a. The New Matter Doctrine Is Inapposite

Oddly, Station cites to *Glaxo Wellcome, Inc. v. Impax Labs., Inc.*, 356 F.3d 1348, 1354 (Fed. Cir. 2004), to support its assertion that the prosecution history cannot be used to provide claim definiteness. *Glaxo* has no bearing on this issue for three reasons. First, there is no argument by anyone in this case that Harrah’s attempted during prosecution to add new matter to the patent claims or the specifications. The specifications as filed

disclose the inventions as claimed, *supra* pp. 5-8, and the term “theoretical win profile” was included in the original disclosure. JAX498-99. Second, *Glaxo* is a decision about infringement and the doctrine of equivalents, not indefiniteness. Third, even in the context of the doctrine of equivalents, the *Glaxo* court held that “new matter prohibitions [were] not directly germane” and rejected Glaxo’s argument. *Id.* at 1354.

**b. Whether A District Court Can Correct
PTO Error Is Irrelevant**

In another attempt to bolster their unsupported assertions, Station cites to *Group One, Ltd. v. Hallmark Cards, Inc.*, No. 04-1296, 2005 WL 1138998 at *3-4 (Fed. Cir. May 16, 2005), for the proposition that “an error of omission in the claims rendered them indefinite, even though the prosecution history disclosed the missing language.” SB31-32. In *Group One*, the Patent Office had made a printing error which resulted in the omission of a twenty-four-word phrase from the published claim. Not surprisingly, the complete absence of such a large number of words rendered the claims indefinite. This Court held that the PTO had the authority to correct the printing error, but the District Court did not. Again, no one here alleges that there has been a PTO error in this case, nor is there any allegation that words have been omitted from the claims. *Group One* is inapposite.

2. The Patent Examiner Was Not Confused Regarding The Invention

Station would argue on the one hand that the Examiner was presumed to be skilled in the art, yet was somehow duped into allowing the claims because he “was clearly *still* confused when allowing the claims.” SB33 (emphasis in original). To illustrate this supposed fact, Station cites to only one word in one phrase – the Examiner’s reference to “points *in* theoretical win profile.” JAX2584 (with Station’s emphasis). The very next sentence, however, shows that the Examiner understood that a theoretical win profile was different from points, and the context of the Examiner’s entire statement of reasons for allowance shows that the Examiner understood exactly what he was allowing:

The followings [sic] are the Applicant’s statements for how “theoretical win profile” is distinct from the prior art. First, the points in theoretical win profile are based on “monetary value” of the monitored betting activity. Moreover, the theoretical win profile is not accumulated like points, but rather is an estimate of how much money the casino should theoretically win from the customer according to the monitored activity. Secondly, the theoretical win profile is based on the overall betting activity of the customer at a plurality of casino properties, not merely a single property. Thirdly, theoretical win profile is based on a time period, such as the estimated winning over an hour, a day, a trip, or other period of time.

JAX2584.¹

Contrary to Station's assertion that a patent examiner is presumed to have ordinary skill in the art, for which they cite to a 1946 CCPA decision, *In re Beach*, 152 F.2d 981 (C.C.P.A. 1946) (SB33), this Court has explained that examiners "are assumed . . . to be familiar from their work with the *level* of skill in the art" *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1359 (Fed. Cir. 1984) (emphasis added). Given the level of complexity and the myriad technologies that examiners today review, a presumption that an examiner had ordinary skill in the art would make no sense. This Court elaborated on the significance of an examiner's level of skill in *Western Elec. Co., Inc. v. Piezo Tech., Inc.*, 860 F.2d 428, 433 (Fed. Cir. 1988), stating that "it is not the particular examiner's expertise that gives the decisions presumptive correctness but the authority duly vested in him by his appointment as a patent examiner."

3. Describing "Theoretical Win Profile" As "Functional" Is A Red Herring

A broad claim expressed in functional terms is not by its nature indefinite. In its brief, Station repeatedly argues that a broad definition of

¹ The Examiner appears to have dropped a few lines from the Applicant's statements which the Examiner said he was quoting. Compare Applicant's statement at JAX2517-18.

theoretical win profile, with no specific formula or algorithm specified, is *ipso facto* indefinite. SB15; SB34-37. This might be the case if the claims specified that the “theoretical win profile must be greater than \$42.” But the claims do not give rise to such need for comparison or calculation. Rather, at most, some claims require that the theoretical win profile need only be used to determine comps, a qualitative rather than quantitative process. There is no uncertainty in the definition of theoretical win profile – it is any summary or analysis of theoretical win data across multiple properties over a time period.

4. “Theoretical Win Profile” Does Not Require A Mathematical Definition

The term “theoretical win profile” does not require a mathematical definition in the specification for at least two reasons. First, “theoretical win” was a term that was well known in the art, and there is no dispute that one skilled in the art would readily have known how to calculate “theoretical win.” *Supra*, pp. 9-11. The additional requirement of data from multiple properties does not add mysterious and unknowable complexity to the mathematical calculation. Second, Harrah’s is not required to limit its claims to one particular method of calculating “theoretical win profile.” Any method of calculating theoretical win profile will be infringing as long as it meets the stated requirements, including the multi-property requirement. As

this Court has explained, “[b]readth is not indefiniteness.” *SmithKline*, 403 F.3d at 1341 (citation omitted).

Station’s suggestion that a term requiring a mathematical determination must be mathematically defined is clearly wrong. For example, in *Howmedica*, the term “transverse sectional dimensions” was found to be definite, despite the absence of any definition in the specification as to which dimensions (cross-sectional vs. area) should be measured. 401 F.3d at 1373. *Union Pac. Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 689 (Fed. Cir. 2001), cited by Station for this point, is inapposite. There, the claimed method called for making a series of comparative calculations to determine where to drill for oil based on *specific* types of measured data. The District Court found that the patent did not provide sufficient detail about how to select the appropriate data points and to make the claimed data correlations. This Court explained that “the ‘comparing’ step presumably refers to a complex ‘correlation’ step” which is “a process of stretching and squeezing a TVD log by carefully choosing assumed bed dip angles, until a portion of the TVD log matches a portion of the offset log.” *Id.* at 692. There is no such mathematical or measuring complexity here, and no *specific* method of calculation is required to determine the theoretical win profile.

III. JUDGMENT OF INVALIDITY BASED ON LACK OF WRITTEN DESCRIPTION SHOULD BE REVERSED

The District Court's judgment cannot be sustained on the alternate ground that the Patents in Suit fail to adequately describe "theoretical win profile." The District Court did not perform the proper factual inquiry. Had it done so, the District Court would have been required to deny summary judgment. The evidence that the specifications would have been understood by persons skilled in the art to describe the inventions as claimed was sufficient at least to create genuine issues of material fact about the adequacy of the disclosure.

A. Written Description and Definiteness Are Different Inquiries

The District Court held that the written description requirement was not met "as a matter of law" because the Patents in Suit do "not describe sufficient means such that a competitor would be on notice as to what was covered by the patent." JAX46. This was legal error.

The District Court's conclusory discussion of written description did not address whether persons skilled in the art would have understood from Harrah's applications that the described inventions included the features now claimed. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). Instead, the District Court focused on

whether the specifications gave proper notice of what is “covered by the patent.” JAX46. This is the function of the claims, and whether claims give proper notice is tested by the definiteness requirement of 35 U.S.C. § 112, paragraph 2, not the written description requirement of 35 U.S.C. § 112, paragraph 1. The written description and definiteness requirements are different from one another, with different purposes. *Vas-Cath*, 935 F.2d at 1560-61. The District Court improperly conflated them, ruling that the Patents in Suit failed the written description requirement as a matter of law, because theoretical win profile was indefinite.

Station acknowledges the lack of factual analysis by the District Court, but contends that a separate factual analysis for written description was unnecessary. Station, like the District Court, does not focus on the proper inquiry of whether a person of ordinary skill in the art would have understood from the specifications that they disclosed the subject matter now claimed.

B. Record Evidence Establishes That The Specifications Would Be Understood To Describe The Inventions As Claimed

There is ample evidence that the specifications of the Patents in Suit as filed describe the computer systems and computer-implemented methods now claimed. The specifications describe structures by which these

systems and methods generate a customer's theoretical win profile, and what a theoretical win profile is. As summarized in the '647 patent, the described systems and methods allow "customer data to be accumulated across all casino properties and made available at any casino property without overburdening the individual casino properties' computer systems with unnecessary data." JAX92, 2:20-24. The disclosures of the Patents in Suit include illustrations and descriptions of system architectures, network components and connections, messaging systems, data structures and procedures by which data is accumulated, summarized, updated, accessed and used. The summary data accessible through the national customer tracking and recognition program include, *inter alia*, a customer's "theoretical win profile." JAX96, 9:30-35.

The theoretical win profiles are based on gaming data from slot machines and gaming tables at the affiliated casino properties, and stored as part of customer account information in a central database or a distributed database. JAX95, 8:55-61; JAX98, 14:47-50. Within each casino property, the gaming data is collected by systems for tracking betting patterns "well known in the art." JAX94, 6:5-8. This betting activity, accumulated from all properties and updated using the computer network, is reflected in a separate field of the central customer account for purposes of determining a

customer's "comps." JAX97, 11:27-31. In one embodiment described in the Patents in Suit, comps are awarded to a customer according to the customer's average daily theoretical win. JAX97, 12:56-59. This average daily wager figure is based on the customer's gaming activities at all casino properties. JAX98, 13:16-21. Comps may also be based on a customer's average theoretical win per trip. JAX97-98, 12:62-13:1. *See also* HB9-15.

Accordingly, the specifications include words, diagrams and flow charts that fully set forth the claimed inventions. Station incorrectly assumes that a theoretical win profile is a particular mathematical function, and that this is the invention now claimed. The claims at issue do not define the inventions this way. Rather, the patents claim computer systems and computer-implemented methods that provide tools for rewarding a customer with comps based on a theoretical win profile determined from the customer's betting activities at multiple properties.

1. There Is No Inadequacy As A Matter Of Law

Contrary to Station's argument about drafting, the adequacy of the written description is not measured by some arbitrary standard of literal perfection. Equally arbitrary and wrong is Station's argument that a presentation of "formulas, algorithms, tables and numbers" was required to give "substance" to the disclosure. SB5-8.

Neither of Station's arguments supports the District Court's ruling that the specifications are inadequate as a matter of law. The law requires neither perfect literal consistency throughout a specification nor a particular form of description. *Bancorp*, 359 F.3d at 1373; *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1321 (Fed. Cir. 2003).

Further, a specification is not required to define or describe the claimed subject matter exactly. *Union Oil Co. of Cal. v. Atlantic Richfield Co.*, 208 F.3d 989, 997 (Fed. Cir. 2000). One would know even from the isolated statements quoted by Station that a theoretical win profile is a summary (JAX96, 9:30-35); that it is based on a customer's historical gaming data at any of the casino properties affiliated with a casino company and the casino's theoretical win from that gaming (JAX95, 8:51-61); that it is determined over a time period (JAX97, 12:55-67); and that it provides a value used as a basis for comping decisions (JAX97, 12:55-67).

As discussed *supra*, the specifications also disclose accumulating data about a customer's betting activities from all affiliated casino properties and averaging the customer's gaming data from all properties. *See, e.g.*, JAX92, 2:64-JAX93, 3:3; JAX98, 13:2-21. Thus, there is evidence that the specifications broadly teach both theoretical win profiles based on data from an individual casino property and theoretical win profiles

based on theoretical win data from multiple casino properties. There is no confusion regarding the specification's use of the phrase "any" properties in some places, because the phrase "theoretical win profile" as used in the originally-filed specification encompasses profiles of theoretical win data from individual properties and theoretical win data combined from multiple properties. The inventions as claimed were limited by amendment to the second alternative, confirmed both by the language of the claims and the prosecution history.

2. The Specifications Describe The Multi-Property Aspect Of The Claimed Inventions

As Harrah's discussed in its opening brief (and *supra*, p. 9), both parties offer expert opinion that the specifications of the Patents in Suit would be understood by persons skilled in the art to disclose the multi-property aspect of the claimed inventions. JAX3138-3140; JAX3841; JAX8191-92. The District Court did not address this evidence in its written description analysis. Station addresses this evidence only obliquely, citing cases for the proposition that expert testimony can be discounted on summary judgment. SB47. None of these cases is on point. *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 928 (Fed. Cir. 2004) (compound required for practicing claimed method not known); *New Railhead Mfg., L.L.C. v. Vermeer Mfg. Co.*, 298 F.3d 1290, 1295 (Fed. Cir.

2002) (claimed feature missing from disclosure could only be ascertained by making the patented invention); *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997) (claimed invention required modification from what was disclosed).

3. The Specifications Need Not Give A Formula

The description of an embodiment of the invention in which the theoretical win profile includes an average daily win figure based on the customer's betting activity at all casino properties supports a finding that the disclosure teaches the inventions as claimed. It does not make averaging a *necessity*. "Averaging" does not define theoretical win profile: the claimed inventions do not require a particular type of averaging, or averaging at all.

Moreover, even if averaging were a necessity, the testimony of the experts confirms that the types of averaging are well known, that the use of averaging in profiling theoretical win from play at a single property is well known and that, as described in the specifications, a theoretical win profile is no different than traditional averaging or other summary or analysis of theoretical win, other than the multi-property aspect. JAX7805; JAX3138; JAX8190-92. Harrah's expert confirmed that persons skilled in the art would know how to use averaging in implementing an embodiment of a theoretical win profile as claimed. JAX3139-3140.

C. Theoretical Win Profile Is Not A “Purely Functional Limitation”

Station asserts that the written description requirement necessitates a known or disclosed correlation between a theoretical win profile and the structure or acts by which it is computed. SB50. The premise for this argument is that the term theoretical win profile is “purely functional,” citing the District Court’s opinion. JAX40. Harrah’s addressed the error in the District Court’s characterization of a theoretical win profile as “functional” claiming in its opening brief. HB35-39. As discussed therein, neither the language of the claims nor the definition of a theoretical win profile is purely functional. The cases cited by Station are not to the contrary.

1. Cases Cited By Station Do Not Support The District Court’s Judgment

In *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 323 F.3d 956 (Fed. Cir. 2002), this Court addressed the written description requirement in the context of claims to nucleotide sequences defined by their ability to bind to certain DNA. The Court confirmed that compliance with the written description requirement is a fact-based inquiry that necessarily varies depending on the nature of the invention claimed. *Enzo*, 323 F.3d at 963. Thus, the “predictive arts” distinction is alive and well.

This case does not involve an invention defined “functionally,” *i.e.*, by what it does, rather than what it is. As claimed, a theoretical win profile is information stored in a computer in association with a customer’s account. *See, e.g.*, JAX102, 22:30-31. The essential characteristics of that information are defined by the language of the claims as well, *i.e.*, that the information is based on estimated winnings from monitored betting activity of the customer at a plurality of casino properties over a time period. *See, e.g.*, JAX102, 22:23-26. Although some claims also state explicitly that the theoretical win profile is used “for subsequently determining complimentaries or services to be provided to the customer” (*e.g.*, JAX102, 22:27-29), the theoretical win profile is not defined solely by how it is used.

2. The Specifications Describe A Structure-Function Relationship

Even if it were required that the written description provide a correlation between the theoretical win profile and structures and acts by which it is generated, the specifications would fully satisfy this requirement.

The specifications teach the computer systems and methods by which customer betting data is obtained at the casino properties, how it is transmitted across a computer network and stored in databases, how it is reflected in a separate field in a customer account, how it is updated, accessed and used. Theoretical win is explained, as is comping based on an

average daily theoretical win figure that includes the customer's gaming activities at all casino properties. *Supra*, p. 21.

Further, mechanisms for computing theoretical win were well known, as were methods of profiling data, *i.e.*, summarizing or analyzing data. Thus, the specification would apprise those skilled in the art how to compute a theoretical win profile, including, for example, how to compute an average daily theoretical win figure based on the customer's betting activity from a plurality of properties. JAX3138-3140. The fact that there were many ways of doing this does not undercut the point.

The structure-function relationship here is straightforward. In evaluating prior art or proposed future devices, skilled artisans can readily examine whatever computational approach is being used and determine whether it generates a summary or analysis as a function of theoretical win data from a customer's betting activity at multiple properties over a period of time.

D. There Is A Genuine Dispute Over The Disclosure Of The Specifications

Harrah's presented evidence, including both specific references to the discussion in the specifications and the declarations of the inventor and an expert, demonstrating that skilled persons would have understood the specification to describe the inventions, including theoretical win profile, as

claimed. In light of this evidence, the District Court clearly erred in finding on summary judgment that certain terms in the specifications are not descriptive of a theoretical win profile (*i.e.*, “average daily theoretical win,” “average theoretical win profile” and “average daily wager figure”). The District Court did not provide any explanation of its finding. JAX42.

Harrah’s does not rely solely on the appearance of the phrase “theoretical win profile” in the original disclosure, taken out of context, to satisfy the written description requirement. Accordingly, Station’s reliance on the discussion of the term “automobile” in *Univ. of Rochester*, 358 F.3d at 923 is misplaced.

IV. THE PATENTS IN SUIT DO NOT VIOLATE THE BEST MODE REQUIREMENT

The District Court correctly denied Station’s motion for summary judgment of invalidity based on failure to disclose the best mode, holding that there was a genuine issue as to whether the inventors possessed a best mode and, if so, what the best mode was. However, the Court entered a finding that, if the best mode was as Station alleged, then it was inadequately disclosed. JAX51. This finding, on summary judgment, was incorrect as a matter of law and should not be allowed to stand.

Under 35 U.S.C. § 112, a patent specification must “set forth the best mode contemplated by the inventor of carrying out his invention.” “The purpose of the best mode requirement is to restrain inventors from applying for patents while at the same time concealing from the public preferred embodiments of the inventions they have in fact conceived.” A two-prong best mode analysis is required. “The first prong [of the best mode analysis] is subjective, focusing on the inventor’s state of mind at the time he filed the patent application” This inquiry “asks whether the inventor considered a particular mode of practicing the invention to be superior to all other modes at the time of filing.” Only if the finder of fact determines that a best mode was contemplated does the analysis proceed to the second prong. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1330 (Fed. Cir. 2002).

“If the inventor contemplated . . . a preferred mode, the second step is to compare what he knew with what he disclosed to determine whether the disclosure is adequate to enable one skilled in the art to practice the best mode.” *Transco Prods. Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 560 (Fed. Cir. 1994) (citation omitted). This inquiry, which involves assessing the adequacy of the disclosure, “is largely an objective inquiry that depends upon the scope of the claimed invention and the level of

skill in the art.” *Id.* “[W]hile the best mode requirement cannot be met solely by reference to the knowledge of one of skill in the art, neither does it demand disclosure of every preference an inventor possesses” *Bayer AG v. Schein Pharms., Inc.*, 301 F.3d 1306, 1314 (Fed. Cir. 2002). “The best mode requirement does not extend to ‘production details,’ including commercial considerations” *Teleflex*, 299 F.3d at 1331. Further, “[r]outine details need not be disclosed because one skilled in the art is aware of alternative means for accomplishing the routine detail that would still produce the best mode of the claimed invention.” *Teleflex*, 299 F.3d at 1332 (citation omitted).

The District Court was correct in holding that there were at least genuine issues as to the first prong of the best mode analysis. At most, Station could point to testimony from one inventor that he had contemplated implementing his invention by using different forms of average theoretical win as the value for the theoretical win profile, including weighted averaging and straight line averaging. There is no testimony that any specific form of averaging, or even that averaging in general, was “preferred” or “best.” JAX48-49. Station’s entire case for alleging that the inventors contemplated a best mode was based on sheer speculation.

The District Court should have treated the second prong of the best mode analysis the same way. There is no "basis" for entering a "finding" that the "alleged best mode" was inadequately disclosed. Certainly, if the alleged best mode was the use of "average daily theoretical win" or "average theoretical win per trip" for the theoretical win profile, such was explicitly disclosed. Even if a more specific type or types of averaging calculation were the alleged best mode -- e.g., straight line or weighted averaging -- there is at least a genuine issue as to whether the explicit disclosure of averaging is an adequate disclosure of these and other specific averaging techniques. The record establishes that such techniques were common knowledge in the art. JAX7805. The best mode provision does not require explicit disclosure of details that would have been well known to someone skilled in the art. *Teleflex*, 299 F.3d at 1331-32.

Station cannot avoid these genuine issues of material fact by recharacterizing the alleged best mode, as it attempts to do in its brief, asserting that the inventor testified that the actual win profile was going to be implemented by applying a series of functions and/or factors to theoretical win that came from each of the properties. SB 63. This testimony does not establish that the inventor considered a particular mode of practicing the invention to be superior to all other modes at the time of

filing and, even assuming that this was the inventor's best mode, there remains the genuine issue of whether the explicit disclosure of using "average daily theoretical win" or "average theoretical win per trip" was adequate. Station's reliance on *Chemcast Corp. v. Arco Indus.*, 913 F.2d 923 (Fed. Cir. 1990), is unavailing, because Station has not identified any non-claimed elements necessary to practice the alleged best mode that were not disclosed and, as discussed above, the record establishes genuine issues about what was disclosed and what was common knowledge in the art.

V. CONCLUSION

The District Court's judgment of invalidity should be reversed as to all claims.

Respectfully submitted,

A handwritten signature in cursive script, reading "Norman H. Beamer", is written over a horizontal line.

Norman H. Beamer
ROPES & GRAY LLP
Attorneys for
Plaintiffs-Appellants

PROOF OF SERVICE

I, Linda E. Rost, hereby certify that on the 14th day of June, 2005, I caused the original and eleven copies of the accompanying:

REPLY BRIEF OF PLAINTIFFS-APPELLANTS

to be sent by Federal Express to:


Clerk
United States Court of Appeals
for the Federal Circuit
717 Madison Place N.W.
Washington, D.C. 20439

and two copies of this paper to be sent by Federal Express to Attorneys for

Defendants-Appellees as follows:

Ike Lawrence Epstein, Esq.
Michael N. Feder, Esq.
BECKLEY SINGLETON
530 Las Vegas Blvd.
South Las Vegas, NV 89101
Tel: 702.385.3373

Christopher E. Chalsen
MILBANK, TWEED, HADLEY
& MCCLOY LLP
1 Chase Manhattan Plaza
New York, NY 10005
Tel: 212.530.5000



Linda E. Rost

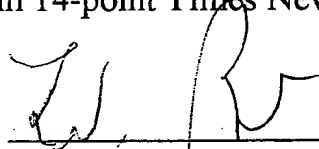
**CERTIFICATE OF COMPLIANCE PURSUANT TO RULES
32(a)(7)(C), FED. R. APP. P., AND 32(b), FED. CIR. R.**

I hereby certify that:

1. This brief complies with the type-volume limitations under Rules 32(a)(7)(B)(i), Fed. R. App. P., and 32(b), Fed. Cir. R., and that the word processing system used to prepare the brief indicates that it contains 6,930 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Fed. Cir. R. 32(b).

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2000 in 14-point Times New Roman font.

Dated: June 14, 2005



Linda E. Rost